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FINAL TECHNICAL REPORT

"A STUDY OF THE DETERMINANTS AND QUALITY OF
CONDOM USE IN TWO EASTERN CARIBBEAN COUNTRIES:
BARBADOS AND ST. LUCIA"

November 15, 1988 - July 15, 1989

The Population Council
Pauline Russell-Brown
John W. Townsend

In collaboration with
Ministry of Health and the Family Planning Association
St. Lucia

Family Planning Association
Barbados

The Population Council, an international, non-profit organization established in 1952, undertakes social science programs and research to develop and improve contraceptive technology. The Council provides advice and technical assistance to governments, international agencies and non-governmental organizations, and disseminates information on population issues through publications, conferences, seminars, and workshops.

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SUMMARY

In the context of reproductive health care in the Eastern Caribbean, there is now renewed interest in the condom: first as a major source of protection against unwanted pregnancy, and second as protection against sexually transmitted diseases, especially, AIDS. In spite of an overall third place ranking in terms of use, available data indicate considerable variation between countries in the use of condoms. And although for the past two years there have been reports of increased sales and demand for condoms, very little is known about the attitudes of males and females to condom use. The issue of the quality of the product has also rarely been explored as a factor in continuation of use or user satisfaction.

A study on the acceptability of condoms as well as the quality of protection provided was conducted in Barbados and St. Lucia in 1989. Three research approaches were used: 1) interviews with decision makers in the region involved in condom promotion and/or distribution; 2) focus group interviews with males and females who were either currently using or had used condoms; and 3) a panel study of male users of condoms including a sub-study on the quality of condoms used.

The results of this study and their policy implications are as follows. Interviews with managers of the leading condom distribution and sales agencies in both countries suggest that condom sales have increased in the past two years, an increase attributable to the presence of HIV in the Caribbean. Furthermore, there has been an increase in the number of available brands of condoms and a change in the profile of the condom purchaser. Retailers report a small but growing proportion of female purchasers of all ages and young male purchasers.

Most of the men in the panel began using condoms in their late teenage years as a contraceptive (82.6% in Barbados and 97.2% in St. Lucia): less than a third reported protection against STDs as a primary motive for use at the outset. Although most men still currently use condoms as a contraceptive, approximately 60% of the panel participants in Barbados and over 70% in St. Lucia also use condoms as protection against AIDS and other sexually transmitted diseases.

All men had quite positive attitudes about the condom, and as experienced users were familiar with the features of condoms on the market. Most of the men in both countries had tried a number of condom brands. In Barbados, the number of brands ever-used ranged from 2 to 12 (mean 5.3 brands), and in St. Lucia from 1 to 8 (mean 3.8 brands). The four most frequently cited brands were the same in both countries, namely Sultan, Rough Rider, Durex and Panther.

In deciding which condom to buy, the men in Barbados considered the experiences of friends with the product (76.1%), advertising (26.1%), and packaging (17.4%). In St. Lucia men were influenced by, experiences of friends (33.3%), price (25.0%), and advertisement (19.4%).

The number of condoms used during the last month varied little by country, about 16; however the range was quite large, that is 4 to 43. About 67% of the men in Barbados did not use a condom with every sex act, in contrast to the men in St. Lucia where 63.9% reported using condoms each time they had sexual relations.

Each panel member was asked to make a comprehensive report on each condom that broke. The data collected from panel members indicate that in Barbados, 261 (12.9%) of the condoms used in the study broke. In St. Lucia, breakage of the condom occurred in 152 (10.1%) of the cases in which a condom was used. This percentage of breakage is significantly different than that observed during quality control testing, i.e. 5.6%, in the United States prior to shipment. In over 90% of the cases breakage occurred during a vaginal sexual experience and approximately half of the condoms which broke did so near the closed end. Neither the use of a lubricant nor the location and length of storage by the panel members were considered significant contributors to condom breakage.

Because data were not previously available on condom breakage during actual use, failure rates of between 3 and 12 per 100 couple-years were frequently attributed to the lack of consistency of use (Galer, 1986). While this certainly remains a problem, closer examination of testing and storage procedures should be made.

More than two-thirds of the men in each group (Barbados 67.4% and St. Lucia 69.4%) were concerned about sexually transmitted diseases (STDs) when having sex with someone other than a regular partner. Although the greatest concern was about AIDS (Barbados 93.5% and St. Lucia 72.0%), there was common concern about Gonorrhoea, Herpes, and Syphilis.

Virtually all men reported that using condoms and avoiding sex with infected persons reduced the risk of contracting HIV, many of the men had misconceptions about the effectiveness of other measures, which have little relation to the risk of HIV infection, for example, avoiding close contact with infected person, blood donation, and using public baths. For both groups, however, increased knowledge about AIDS has led to more frequent use of condoms, fewer sexual partners or at least more careful selection of sex partners.

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In conclusion, the condom continues to be used by men in the Eastern Caribbean, initially as a contraceptive but primarily as protection against AIDS and other STDs. The experience of friends, advertising and packaging are the factors which influence the purchase of condoms. The results of this study lead us to make specific recommendations concerning the promotion of the condom, not only as a prophylactic but also as an effective contraceptive for married couples as well as for individuals in less formal relationships. Information and education activities designed to the promote use of condoms must also target females and young males as they have become important groups in the purchase and use of condoms.

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SUMMARY

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I. PROBLEM DESCRIPTION

The condom has held a relatively modest position among the methods of contraception used by couples in the Caribbean. As early as 1971, for example, nearly 18 percent of all contraceptive users in Barbados reported using the condom as the principal method of protection against pregnancy (Ebanks and Gilkes, 1973). But since the expanded availability of oral contraceptives, injectables and sterilization, the use of the condom has declined. For example, in the recent contraceptive prevalence survey (CPS) in Barbados (1988) conducted by the International Planned Parenthood Federation (IPPF/WHR), the prevalence of condom use reported by non-pregnant fecund women in-union was about 7 percent, compared with approximately 11 percent for sterilization, and nearly 30 percent for orals. Although condom users represented about 12 percent of all users, they accounted for approximately one third of the users of contraception between 15-19 years of age (Jagdeo, 1989).

In the English-speaking countries of the Eastern Caribbean as a whole, the condom is currently the third most frequently used contraceptive method. However, CPS data available indicate that there is considerable variation between countries in the use of the condom as a contraceptive. In the 1981 contraceptive prevalence surveys conducted in Antigua, Dominica, St. Lucia and St. Vincent, for example, between 2 percent and 11.2 percent of exposed women were using a condom (Harewood 1982). More recent CPS data indicate that condom use varies from approximately 25 percent of contraceptive users in Grenada to less than 10 percent (7%) of contraceptive users in Montserrat (Jagdeo, 1985, 1987). The primary source of supplies for condom users in most countries is the Family Planning Association (FPA) clinic and community-based distribution (CBD) programs, although social marketing efforts have recently included commercial channels as an alternative source of supply.

Although the condom is a male method of contraception, very few surveys of male use and attitudes toward contraception and specifically, the condom, have been conducted in the Eastern Caribbean. The major research conducted to date on condom use has been directed primarily at exploring the prevalence of its use as a contraceptive method by questioning women. Most of the available data on condom use have been gathered during contraceptive prevalence surveys (CPS), in which women have reported on the use of condoms by their partners.

Understandably, the three male attitude surveys, conducted in Barbados, Dominica and St. Kitts, have provided a somewhat different picture of condom use to that obtained from female users

of contraceptives and as such provide a valuable perspective on male attitudes toward family planning in the Eastern Caribbean. Statistics from the male attitude surveys indicate that 10 percent of men in the society use condoms and some 50 percent have used them at least once (Lewis & Hersler, 1982). This finding suggests that condoms have been widely used outside of formal unions, either to prevent an unwanted pregnancy or as protection against sexually transmitted diseases.

Although the prevalence of condom use is relatively low, renewed interest in the condom in the Eastern Caribbean during the past five years may result in increased use of the method in the near future. First, the condom is being reexamined as a major source of protection against pregnancy for couples interested in birth spacing. Secondly, with the emergence of AIDS as a major public health concern and the increased incidence of resistant strains of some sexually transmitted diseases, the condom has taken a central role in preventive efforts to improve reproductive health.

The theoretical effectiveness of the condom, estimated at between 0.5 and 2 pregnancies for each 100 couple years of use, is quite attractive to many couples. However, actual use effectiveness is considerably lower, particularly for couples not interested in limiting births (Hatcher, 1982). In spite of this, attitudes toward the use of condoms and characteristics of actual use, for whatever reason, have not been systematically explored among either sex.

Some qualitative information has been collected by the Caribbean Family Planning Affiliation (CFPA) in the development of IE&C materials for the region. Another source has been social marketing agencies interested in measuring the effect of media promotion on brand awareness (e.g. PANTHER condoms). Frank Armstrong Ltd. was involved in a wide range of promotional activities including Point of Purchase (POP) displays and media promotion using the press, radio and television. They organized retail training seminars, detailing strategies and developed generic advertising for condoms in the mass media. Qualitative research conducted in the development of this promotion suggested that the condom was considered a male contraception for use outside of stable relationships. Its use was also considered unreliable and/or inconvenient by others. It is not clear if many of these image problems remain.

In terms of STD prevention, the condom has been widely promoted as an effective prophylactic in the prevention of sexually transmitted diseases. The need for promotion of the condom could

certainly be no greater than now. As of September 1989, there had been 101 reported cases of HIV/AIDS in Barbados: 3 males to every one female. The mortality rate at that time was 72 percent. In St. Lucia, the number of HIV/AIDS cases was considerably smaller. For example, by March 1989 only 16 cases had been reported. While the total number of cases is small, the incidence is considerable given the size of the population. In contrast are the other STDs which continue to be of concern. For example, the number of cases of syphilis reported in St. Lucia in 1985 was 258, a decline from 415 in 1983 (CAREC, 1985) while in Barbados, a total of 240 cases of syphilis was seen in public clinics during 1984. (CMO Annual Report, 1984). Clearly, more information is needed about how the condom is perceived and utilized so that programs which promote the use of condoms can be better designed.

II. SOLUTION DEVELOPMENT

During the past five years, the condom has been increasingly visible as an acceptable family planning method in the Eastern Caribbean. Its accessibility has increased as condoms have become reliably supplied in the context of community-based distribution (CBD) programs, social marketing efforts and commercial retail sales. They are no longer hidden behind the pharmacist's counter, but rather are now on display in many popular commercial establishments.

In the past three years, also, condom promotion has taken on new significance. All the countries in the Eastern Caribbean have adopted strategies for preventing the spread of the HIV and have initiated prevention efforts. The focus of most of the efforts has been on increasing public awareness about the transmission of the virus and on promoting the idea of responsible sexual practices. Central to these efforts is the promotion of the use of the condom.

The success of these AIDS prevention strategies is, however, dependent on changes in public attitudes toward the disease and the adoption of behaviors to control its spread.

As a product commonly distributed through commercial and social marketing channels, consumers' perceptions of the acceptability of the condom and the demand for its use are therefore important factors in its promotion. Furthermore, in the future, the sale of condoms will play an increasingly important role in income generation and the sustainability of family planning programs in the Caribbean.

Since there is little information available about the actual use of condoms and users' experience with the method, it is important that studies of the cultural and social acceptability of the condom as well as the quality of protection condoms provide are conducted. These studies are necessary in order to support the development of effective program strategies for both family planning and AIDS prevention.

III. STUDY OBJECTIVES

The general objective of this study, therefore, was to provide information on the determinants and quality of condom use in the region. The study was a collaborative effort with the Ministry of Health and the Family Planning Association in St. Lucia and with the Family Planning Association in Barbados.

The specific objectives of the study were to:

1. describe the existing condom market and the concern of decision makers about the underutilization of condoms in the region;
2. determine the primary motivation for condom use and non-use among sexually active males and females;
3. determine the attitude of users to the use of condoms and their perceptions of their role in the initiation and continuation of condom use;
4. assess the frequency of condom use and whether use is consistent over time and for all sexual relations;
5. evaluate the quality of condoms during use as well as user satisfaction with the product;
6. assess the user's awareness and comprehension of the media promotion about "safe sex" and the use of condoms in preventing the spread of the AIDS virus.
7. provide decision-makers with specific suggestions about how to improve condom promotion and use in the region.

IV. METHODOLOGY

A. Research Design

The study, which was largely diagnostic in nature, utilized three specific approaches: 1) interviews with decision-makers in the region involved in condom promotion and/or distribution; 2) focus group interviews with males and females, current and former users of condoms; and 3) a panel study of male users of condoms, including a sub-study on the quality of the condoms used.

Two countries, Barbados and St. Lucia, were selected to participate in the study. Barbados, the larger of the two countries with a population of about 253,000, has had a long tradition of tourism and the largest manufacturing base among countries in the Eastern Caribbean. St Lucia, on the other hand, has a predominantly agricultural economy and a population estimated at 145,000. Contraceptive prevalence is above 50 percent for each country, although the total fertility rate is about 4.2 for St. Lucia and less than half (1.9) that for Barbados. The condom is a well known contraceptive method in each country; however, the prevalence of use of the condom reported by women in-union is about 5-7 percent.

The primary selection criterion was prior country experience with the promotion of the condom and of condom use: for example, activities to promote the use of condoms through CBD programs and social marketing channels. Both countries have had aggressive promotion of the condom (Panther) through the Caribbean Contraceptive Social Marketing Program (CCSMP) and more recently efforts of the Ministries of Health and AIDS Committees to promote "safe-sex" practices. One would expect that high efforts at promotion would contribute to clearer perceptions about the acceptability and effectiveness of the condom and produce less disagreement among informants about its characteristics.

B. Interviews with Decision Makers

Health and family planning program managers within Ministries of Health and Family Planning Associations (FPAs) and private pharmacists in the two countries were an important target group to assist in defining priority issues for the study.

In Barbados, interviews were conducted with the Director of the CBD program and with representatives of Frank B. Armstrong Ltd, the firm involved in the social marketing of condoms in the Eastern Caribbean. Interviews were also conducted with a representative of three of the other five leading private sector condom

distribution agencies in the country and with the distributor responsible for installing condom machines. Owners of 3 large pharmacies in Bridgetown, the capital, were also interviewed.

In St Lucia, interviews were conducted with the Director of the CBD program, with representatives of the 2 condom distribution agencies in the country (Frank B. Armstrong and Renwick & Company) and with the owners/managers of 5 of the 8 pharmacies in the capital, Castries.

Each meeting provided an opportunity to describe the objectives and components of the research, seek guidance in selecting issues for the focus group interviews and develop plans for the utilization of the data. Data on the characteristics of condom purchasers were obtained during these interviews. During the visits, background data were also collected on the condom market in each country selected. Each distributor was requested to provide data on: the number and names of brands available, the number and types of sources of supply, the cost of commodities to the consumer, as well as a timetable and review of efforts at promotion during the past.

In addition to interviews with retail managers, an observational tour of selected pharmacies in each country was conducted. These tours provided information on the brands available, the location of the product in the retail outlet, special promotions or display of condoms, and the procedure for purchasing condoms.

C. Focus Group Interviews

Qualitative data were collected during focus group interviews in each country. Each group comprised sexually active participants between 15 and 35 years of age. A total of the seven groups was convened, three included only males and four only females. In each country, two groups were to have been conducted with current users of condoms (use during last two months) and another two groups with current non-users and persons who had never used a condom. Since it was difficult to identify an adequate number of individuals who had never used a condom, non-users were combined with users.

The group interviews were designed to study those issues related to condom use which are best explored in a group setting. As indicated earlier, some of the issues discussed in the groups were identified during interviews with pharmacists and with representatives of condom distribution agencies. The issues discussed included: the image of the condom among friends and in

the community; the primary motivation for condom use and non-use among sexually active males and females; for users, whether use is consistent over time and for all sexual relations; the attitude of users to the use of condoms and their perceptions of their role in the initiation of condom use; user satisfaction and reasons for dissatisfaction with the product; the awareness of the media messages on "safe sex", the risk of AIDS and the use of condoms in preventing the spread of HIV.

D. Panel Study

A panel study of male condom users was conducted in each country. The panel comprised men recruited over time through family planning clinics, through community-based distribution programs and by word of mouth. During a period of three months, each panel member was supplied, on a monthly basis, with SULTAN condoms provided by the Office of Population, USAID/W (style B reservoir tip), class B (lubricated) type condoms (180mm in length and 52mm in width). Each panel member was provided with a monetary incentive to collaborate in the study. The incentive was the equivalent of US\$38 in Barbados and US\$25 in St. Lucia.

Each panel member was asked to keep a diary of his condom use while he was a member of the panel. To assist panel members in collecting those data each participant was provided with a set of short questionnaires: one to be completed each time one of the supplied condoms was used. The data collected included: a record of coital activity, information on each episode of condom use, including date of use, number of condoms used, wastage (open package without putting condom on), incidence of breakage, disposal procedures and where condoms are stored prior to use. In addition, the user was asked to report on the type of sexual activity and if another contraceptive was used at the time. A complete description of each case of breakage was requested, including the circumstances surrounding the breakage and a description of the point of breakage on the condom. Somewhere from 3 to 36 cases of breakage were expected in a sample of 3600 condoms.

At the end of his participation in the panel, a more in-depth interview was conducted with each panel member. That interview was expected to generate data about sexual activity and condom use, the user's preference and satisfaction with condoms in general, and more specifically with those provided during the panel study, including his experience and practices with condoms (for example, breakage, slippage, use of lubrication and examination of the condom). At the end of the panel study, all unused condoms provided by the study were collected from the panel members and returned to AID/W for testing.

Of the 50 men who initiated the panel study in Barbados, 46 (92%) were available for the interview. In St. Lucia, only 36 of the 52 (69%) men who participated were available and willing to be interviewed. The interview process seemed to be much more threatening to the men in St. Lucia than in Barbados.

All the men from the panel who were surveyed were exclusively heterosexual, sexually active and all were confirmed condom users prior to the study. Data presented in Table 1 indicate that the participants in Barbados were significantly younger than those in St. Lucia (Barbados 27.4 years, SD=4.5, range 19-40 versus 33.7 years, SD=6.6, range 21-50 in St. Lucia), and less frequently married or in a common law union (Barbados 19.5% versus 36.1% in St. Lucia). Over 60% in St. Lucia and over 70% in Barbados reported being single or divorced. During the past year, they had an average of four to five sex partners (Barbados 5.5, SD=5.9, range 1-31; and St. Lucia 3.8, SD=5.8, range 1-33). There was no significant difference between the two groups on the number of sex partners.

V. RESULTS

The data collected using the three research approaches have been analyzed around six main themes. The first theme - Status of the Existing Condom Market - addresses the current condom market in Barbados and St. Lucia, and includes information on condom availability and sales. Under the second theme - Motivation for Condom Use - the reasons given for condom use, the acceptability and demand for condoms and the profile of the condom purchaser are reported. The Attitude to Condom Use, and, The Frequency and Consistency of Condom Use are the next two themes. The data collected in the panel study serves as the basis for the fifth theme - Quality of Condoms. Finally, community knowledge of AIDS and their awareness of AIDS media promotion and education are presented as the sixth theme.

A. Existing Condom Market

1. Condom Availability

Condoms are widely available in both Barbados and St. Lucia. In Barbados, condom supplies can be obtained from more than 30 pharmacies, 8 government polyclinics and more than 100 CBD outlets, most of which are serviced by the Barbados Family Planning Association (BFPA). Since 1987, condoms have also become available from condom machines installed in selected night clubs and hotels. A smaller number of condom outlets operate in St. Lucia. In that country, condoms are available from 11 pharmacies nationwide, approximately 60 CBD outlets operated by the FPA and all government health centers.

At least 42 types (16 brands) of condoms are available on the market in Barbados. The latest brand (Contempo) was introduced as recently as March 1989. In the same way that there is wide variation in type of condoms available, there is also price variation. Prices range from US\$0.50 for a strip of 4 condoms to as much as US\$10 for a set of 20 condoms. There are predictions, however, that with increases in the price of rubber - an increase resulting from the demand for condoms internationally - it is unlikely that the price of condoms will be maintained at present levels. There is also the feeling among some distributors that if the price of condoms should increase, the more expensive brands might lose some of their share of the market to less expensive brands.

Unlike Barbados, there is a more limited range of condoms on the market in St. Lucia. Between 5 and 6 brands of condoms are available in that country. There is also wider variation in price. Prices range from US\$0.04 cents per unit for the FPA brand

available from CBD outlets, to approximately US\$1.50 for a pack of 3 condoms (Durex).

Altogether, there are 6 agents for condoms in Barbados and 2 in St. Lucia. With the introduction of contraceptive social marketing (CSM) and the more aggressive advertising of condoms, in Barbados-based media, competition for market share has recently become more fierce. Durex brands, which in the past had the largest market share in both countries, have now lost some of the market in Barbados to Rough Rider and Panther and to Rough Rider in St. Lucia. The distributors for Panther are becoming increasingly concerned because of the increase in sales of Rough Rider, a relatively new brand on the market. Packaging as well as the presence of "hundreds of raised rubber studs" have been suggested by the retail managers as reasons for its popularity among male and female users. A recent condom tracking study conducted for the CCSMP among males in Barbados and St. Lucia indicates that perceived strength and power are two reasons for Rough Rider's recent dominance of the condom market. (Applied Marketing Consultants, 1989).

2. Condom Sales

Distributors agree that condom sales have increased since 1985 but report that sales have peaked. The sales data available for the two countries corroborate this perception. As indicated in Table 2, between 1985 and 1987 condom sales increased by 61% in Barbados, from approximately 86,000 to over 139,000. Sales increased for all the distributors for which data are available: F.B. Armstrong, the Barbados Family Planning Association, T. Geddes Grant and A&R Tempro. In 1988, however, the Barbados condom market seemed to soften with a 16.6% drop in sales compared to the previous year.

Similar trends were observed in St. Lucia, although the absolute number of condoms sold was considerably smaller and the downturn in sales did not occur until early 1989. Based on sales during the first quarter of 1989, it appears as though annual sales of condoms will continue to drop but not dramatically. Given the current trend, distributors and retailers alike are concerned about underutilization as their shelf-space and profits in the sale of condoms rely on a brisk commercial market. This is particularly true when the Ministries of Health provide condoms free through health centers.

While there has been an increase in condom sales, distributors question how much of that increase is due to shifts from the more "traditional" brands like Durex to the newer more high profile

brands. The argument used to support this observation is that condom preference and selection is related to age. The suggestion is that older males prefer condoms which are thinner (sensitivity factor), whereas the younger males are attracted by erotic sounding and suggestively packaged condoms which tend to be toward the middle and lower end of the price range.

Retailers also feel that whereas 3 to 4 years ago price was a critical factor in brand selection, with men frequently choosing the cheaper brands, there appears to be a shift in preference. Consumers seem to be more interested in quality (specifically, safety, durability and strength) and so purchase the more expensive brands. The perception is that there is a positive relationship between quality and price.

B. Primary Motivation for Condom Use

Although public and private sector outlets report increased sales and demand for condoms, very little is known about the attitudes of males and females to the use of the condom, the reason for condom use and non-use, and the factors which influence the decision to purchase condoms. These issues were addressed during interviews with panel members as well as during the focus group interviews.

1. Reasons for condom use

Survey data from panel participants provides some insight into the reasons for condom use (see Table 3). For most men in the panel, condom use began before the age of 20 years (Barbados 67% and St. Lucia 58%). However, the average age of first condom use is higher in St. Lucia (22.5 years), when compared to that in Barbados (18.9 years) due to large proportion of men in St. Lucia initiating condom use after the age of 24 (19.4%).

Most of the men began using condoms as a contraceptive (82.6% in Barbados and 97.2% in St. Lucia); less than a third reported protection against STDs as a primary motive for use at the outset. Although most men still currently use condoms as a contraceptive, approximately 60% of the panel participants in Barbados and over 70% in St. Lucia also use condoms as protection against AIDS and other STDs.

2. Acceptability and Demand for Condoms

Anecdotal information obtained during the group interviews with sexually active males and females suggest that condom use is more common during sexual contact with casual sex partners. For example, it is commonly perceived that men only use condoms if they have more than one sex partner. To use a condom with his spouse of his "special/staunch" woman would essentially be an admission that the man has been unfaithful. Perhaps this is the same reason why women in formal unions report that men don't always want to use condoms when requested ("you could ask, but he won't use it"). Thus the public's image of condoms remains a problem.

As experienced condom users, most of the panel members in both countries had tried a number of condom brands. In Barbados, the number of brands ever-used ranged from 2 to 12 (mean 5.3 brands), and in St. Lucia from 1 to 8 (mean 3.8 brands). The four most frequently cited brands were the same in both countries, namely Sultan, Rough Rider, Durex and Panther. However, each of these brands had been used by over 80% of the men in Barbados, but only Durex and Sultan had been used by more than 80% of the men in the St. Lucia sample. Other brands were used exclusively in one or the other country, for example Long Love, Trojan and Kiss of Mint were only reported in Barbados, and Sweetheart and Midnight Special only in St. Lucia.

Among men with a preference, Rough Rider (39.5%), Long Love (30.2%) and Durex (20.1%) were the most preferred brands in Barbados, while Rough Rider (30.4%), Durex (30.4%) and Sultan (26.1%) were the preferences in St. Lucia. In deciding which condom to buy, the men in Barbados considered the experiences of friends with the product (76.1%), advertising (26.1%), and packaging (17.4%). In St. Lucia, price was also an issue influencing purchase as the three most important factors were the experiences of friends (33.3%), price (25.0%) and advertisement (19.4%). Perceived quality of the product is really implied in most of these factors, including price, i.e. higher price is commonly associated with higher quality.

Data from the focus groups are consistent with these results. Men reported selecting condoms based on reports from friends, based on the quality of the packaging and on their own market experience. For example, if a new brand comes on the market, they will buy it and evaluate its performance. Women, on the other hand, report that they will "use whatever my boyfriend brings in".

Distributors acknowledge the role of packaging and public education in increasing acceptability and demand for condoms, but caution that the issue of quality must not be overlooked. Prior to 1984, media promotion of condoms in Barbados was largely generic. The first brand-specific condom promotion was mounted in 1984-85 as part of a sub-regional Contraceptive Social Marketing campaign to promote Panther condoms in Barbados, St. Lucia and St. Vincent and the Grenadines. Since 1987, however, there have been other brand-specific as well as generic advertising on television and in the print media promoting the condom as a vehicle for "safe-sex".

3. Profile of the condom purchaser.

Traditionally, men have been the purchasers of condoms. However, this pattern seems to be changing. Both the focus group interviews and the discussions with distributors provide data which suggest that women are increasingly willing to purchase and use condoms. For example, they maintain that older, middle class, married women are now less reluctant about buying the condom and initiating its use. It may be more suitable to their lifestyle than the daily use of orals, or tubal ligation.

This position is supported by data from contraceptive prevalence surveys in Barbados. In 1980, 10% of all female contraceptive users reported condom use during the month prior to the survey: at the time prevalence was 45%. By 1988, when prevalence was 55% of all women in-union and nearly 62% of all fecund, non-pregnant women in-union were using modern contraception, 12% of female users were using the condom. So in terms of absolute numbers, use of condoms by women in-union has increased substantially during the past eight years.

In contrast, younger single women, are often subject to what they perceive to be disapproving "looks" when purchasing condoms. They feel more ashamed when purchasing a condom at a commercial outlet, and view their behavior as somewhat less socially acceptable.

Although there is evidence that female purchasers are on the increase, there is still a common feeling among males that they should initiate condom use. It appears that men will suspect their partners of infidelity if condoms are routinely purchased or managed by the female sex partners. Regardless of these trends, it is clear that additional work must be done to improve the image of the condom as an acceptable method of contraception in relationships involving responsible sexual practices.

C. Attitude to Use of Condoms

All men in the panel had quite positive attitudes toward the condom and, as experienced condom users, were familiar with the features of condoms on the market. Table 4 describes the attractive and unattractive feature of condoms as reported by panel members. It should be recalled that approximately 90% of condom use reported was for vaginal sexual relations only. The results were quite similar in the two countries. In Barbados the four most attractive features were lubrication (78.3%), extra strength (50.0%), ribbed texture (41.3%) and the reservoir tip (37.0%). In St. Lucia, extra strength was most important (75.0%), followed by lubrication (58.3%), the reservoir tip (47.2%), and the spermicidal protection (19.4%).

By far the most unattractive feature of some condoms for both groups was their being "extra-thin", 63% in Barbados and 53% in St. Lucia. The use of color in condoms, e.g. green, red, yellow, was also an unattractive feature for 11-15% of the men in both countries. In contrast, "extra strength" was an unattractive feature for 20% of men in Barbados, but only 8% in St. Lucia; and lubrication was unattractive for 11% of the sample in St. Lucia but only 2% in Barbados.

Men in the panel were asked to indicate the perceived advantages and disadvantages of condom use for the male as well as the female sex partner. Men in the Barbados and St. Lucia panels felt that protection against infection (93.5% and 83.3%) and pregnancy (80.4% and 86.1%) were the most important advantages to the man for using the condom. The St. Lucia panel also rated "convenience" (58.3%) as one of the more important advantages for condom use. Similar responses were obtained in respect of advantages to the female partner. Fewer men in St. Lucia than in Barbados felt that there were disadvantages for the man who uses condoms while more men in St. Lucia than in Barbados felt that there were disadvantages to the female who used condoms. The perceived advantages and disadvantages of condom use to both sex partners are presented in Table 5.

It has been suggested that the attitude of the female partner to the use of the condom may be one of the barriers to consistent use of the method by the male sex partner. This may in fact be true as the data presented in Table 5 seem to indicate that men are sensitive to the concerns of women about the effect of using the condom. Further, more objection to the use of the condom was heard from the females than from the males in the focus group interviews. Women in the focus group interviews, for example, reported that they did not trust the quality of condoms ("they may burst, or slip

off"), or that condoms interfered with the sensation and pleasure of sex ("like to feel the real thing"; "they cause irritation"; "they make me feel uncomfortable"). While women in the group interviews had first hand experience with irritation and reduced sensitivity resulting from condom use, none of them could report an experience of a broken condom.

Data from the panel study suggest that men, especially in Barbados, need to change their attitude towards the disposal of used condoms. About 30% of the condoms used by the Barbados panel were carelessly disposed of: for example thrown through the window or left at the place where the sex act had taken place (pasture, beach). Panel members in St. Lucia seemed more careful in their disposal of used condoms than panelists in Barbados: only 13.8% of the used condoms in St. Lucia were carelessly disposed of. The toilet was used for disposal of 41.9% of the condoms in Barbados and 36.8% in St. Lucia. A waste bin was more frequently used by men in St. Lucia compared to Barbados: 49.7% compared with 29.1%.

D. Frequency and Consistency of Use

The number of condoms used by panel members during the last month varied little by country. In Barbados the mean number of condoms used by each panel member was 17.7 (SD = 12.6, range 4-43), whereas in St. Lucia it was 15.3 (SD = 5.1, range 6-25).

Of the total number of sexual relations reported on by each panel (2030 in Barbados and 1508 in St. Lucia), from 25-40% were reported as sexual activity with the spouse, 48-50% with a close friend, and the remainder with a casual acquaintance. There was a somewhat higher level of casual sexual relations in Barbados (24.4%) than in St. Lucia (11.7%). Recall that a larger percentage of men in St. Lucia reported being married or in a common-law union (36.1%), as compared to Barbados (19.5%). Table 6 describes the type of relations, but generally more than 90% of the relations only involved vaginal contact, and another 4-5% vaginal and oral contact. Less than 3% involved anal intercourse.

The majority of the men in the panel had had more than one sex partner in the previous year. Further, there are indications that in some cases these were not serious relationships. How consistent therefore, is the use of the condom with the main partner, when there is one, and with the other sex partner(s)? Condom use was not as consistent among the Barbados panel as it was in the St. Lucia panel. Only about 30% of the men in Barbados used a condom with every sex act, in contrast to the men in St. Lucia where 63.8% reported using condoms each time they had sexual relations. Data presented in Table 7 indicate that less than 25% of the panel members in each country used a condom for every sexual

relation with the main sex partner. Further, only 50% of the men in Barbados and 42% of those in St. Lucia used a condom for every sexual relation with a partner other than the main one.

The men in the sample either did not use another contraceptive with their spouse or were largely unaware of the use of other contraceptives by their sex partners. For example, for men in St. Lucia, 96.3% of the sexual relations with the wife/spouse did not involve the use of another contraceptive. In Barbados, the condom was the principle method of contraception in 64.9% of the relations with a spouse. In about half of the relations with casual acquaintances (51% and 45% respectively) the men in each sample did not know if the partner was using another contraceptive method.

E. Quality of Condoms

In the Caribbean, there have been periodic reports of user-dissatisfaction due to the poor quality of condoms (e.g. breakage, wastage, packaging) of the product. However, the issue of quality of the condom has rarely been explored as a factor in continuation of use or in user satisfaction. IPPF reported in 1980 that during use of high quality condoms one could expect breakage in one in every thousand condoms, and a breakage rate of one in a hundred for poorer quality condoms (Kestelman, 1980). More recent data are not available on breakage during actual use.

In this study, the issue of quality of the condom was explored in two ways: a series of laboratory tests and reports of breakage experienced by panel members. Prior to distribution to the panel members, a sample of condoms from the same batch that was used in the panel study was submitted to testing in Washington, D.C. by USAID. All 30 condoms tested met the standards for elongation and tensile strength. All 315 condoms tested met standards about leakage. Only one of the 20 condoms tested for dimensions did not fall within the limit. However, 7 (5.6%) of the 125 condoms tested did not meet the air burst test. In the United Kingdom, industry standards stipulate that a batch of condoms should be rejected if 6 or more of a sample of 125 condoms tested does not meet this test. However, this standard is not used in the United States, so the batch was accepted for distribution.

Each panel member was asked to make a comprehensive report on each condom that broke. The data collected from panel members indicate that in Barbados 261 (12.9%) of the condoms used in the study broke. In St. Lucia, breakage of the condom occurred in (152) 10.1% of the condoms used. This percentage of breakage is significantly different than that observed during quality control testing. Breakage was experienced by at least 37 of the 50 panel

members in Barbados. Most of these men experienced 3 breakages but 10 had more than 10 broken condoms over a three month period. In St. Lucia approximately 50% of the men in the panel reported broken condoms. Most of these men experienced only one broken condom; 5 men had more than 5 broken condoms.

In the majority of cases (92% in Barbados and 95% for St. Lucia) breakage occurred during a vaginal sexual experience. Further analysis of breakage data reveals that more than half of the condoms which broke did so near the closed end (52.4% and 60.7% for Barbados and St. Lucia respectively). Some 22% of the breakage in Barbados occurred in the shaft of the condom. Approximately 25% of the breakage reported in both samples occurred near the open end.

The timing of the breakage did not vary for the two groups of panel members. Approximately 55% of the condom breakage experienced by Barbados panel members occurred during sexual intercourse compared with 56% in St. Lucia. One fifth (20.1% and 20.2%) of the cases of broken condoms in both panels occurred during insertion of the penis into the condom, and in approximately 16% of the cases, the man did not know when the breakage occurred.

These findings taken together suggest either that men are not storing the condoms carefully or not using the method correctly. Information collected on the place of storage and length of storage indicates that the three most common places where men store condoms are, in a drawer in their home, in their wallet or pocket, and the glove compartment of their car. In Barbados 46.4% of the condoms were stored in a drawer at home, 26.6% in the pocket and 16.0% in the car. In St. Lucia 71.5% of the condoms were stored in a drawer, 10.3% were stored in the wallet/pocket, and another 7.9% were stored in the car. The median length of storage differed considerably by country: 11 days in St. Lucia and merely 6 days in Barbados. Understandably, storage time differed by location. The median duration of storage in a drawer was about two weeks, whereas storage in a wallet or pocket was generally shorter, often 3-4 days.

Inspection of the condom before use is not routine and so it is difficult to say whether the condoms which broke were defective prior to use or whether breakage is related to how it is used. Almost half of the men (45.6%) in Barbados and a fourth (25%) in St. Lucia never inspect the condom for flaws before or after use to ensure its integrity. More men commonly inspect the condom before use, but a fourth (26.1%) of the men in Barbados and 38.9% of the men in the St. Lucia sample, inspect the condom both before and after use.

The use of lubricants does not appear to be a factor in the breakage of condoms. Generally, only about 15% of the men in each sample reported adding extra lubrication to the condoms used. Baby oil, hand lotion, and vaseline were the main lubricants added. Only 11 of the 261 broken condoms in Barbados and 3 of the 152 in St. Lucia had been treated with a lubricant.

F. Awareness of AIDS Prevention Promotion

More than two-thirds of the men in each group (Barbados 67.4% and St. Lucia 69.4%) were concerned about STDs when having sex with someone other than a regular partner. Although the greatest concern was about AIDS (Barbados 93.5% and St. Lucia 72.0%), there was common concern about Gonorrhoea, Herpes, and Syphilis.

Although only a minority of the men in the panel know someone with HIV (Barbados 10.9% and St. Lucia 2.8%), about half in each group (42.2% in Barbados and 50.0% in St. Lucia) worried either a lot or constantly about AIDS. While 46.7% of the men in Barbados worried very little or not at all about AIDS, only 27.7% of the men in St. Lucia were not concerned about AIDS. It is unclear whether perceived risk was at all associated with real risk of infection.

Table 8 illustrates the measures to reduce the risk of HIV transmission of which the panel members were aware. While virtually all men reported that using condoms and avoiding sex with infected persons reduced the risk of HIV, relatively few (less than 10%) recognized the role of spermicides. Given the long asymptomatic incubation period of HIV, the men may also be unaware of which of their potential sex partners is seropositive. Moreover, many of the men had misconceptions about the effectiveness of other measures, which have little relation to the risk of HIV infection, for example, "avoid close contact with infected person", "do not donate blood", and "avoid public baths".

Table 9 describes the effect that knowledge about AIDS has had on their sexual relations. For both groups, there is more frequent use of condoms (Barbados 87.0% and St. Lucia 61.1%), fewer sexual partners (Barbados 71.7% and St. Lucia 27.8%) or at least more careful selection of sex partners (Barbados 78.3% and St. Lucia 22.2%). Only in Barbados did a significant number of men refuse to have unprotected sex (50%). About 5% in each group stopped having anal intercourse. For about 15.2% in Barbados and 33.3% of the men in St. Lucia there has been no change in behavior.

Virtually all the men in the study had been exposed to media information about AIDS and AIDS prevention. As indicated in Table 10, most men in the panels (Barbados 84.8% and St. Lucia 72.2%) felt that the information about AIDS presented in the media was complicated, but more than half (52-61%) felt that the information provided about AIDS prevention and treatment was sufficient. Few thought the information was misleading. Almost 90% of the respondents in both groups felt that public information about AIDS should be aired more frequently.

This attitude to the media information on AIDS was similar to that observed in the focus group interviews. Participants, especially those in Barbados, were critical of the frequency and content of the television advertisements as they felt that they were "too nice". The message needed to be stronger if the required motivation to change sexual practices and behavior was to be provided.

VI. DISCUSSION AND CONCLUSIONS

The three approaches used to generate data for this study have provided information on several aspects of the determinants and quality of condom use in Barbados and St. Lucia. These data provide a clearer picture about the nature of the condom market, the purchase and use of condoms, condom users' perceptions and experience of condom quality, and the effect of AIDS education on sexual practices and behavior. Analysis of these data leads one to reach a number of conclusions.

First, condom use is not consistent. Only about 1 out of every 3 men in the Barbados panel and 2 out of 3 in St. Lucia used a condom with every sex act. Even in those cases where sexual relation is with someone other than the spouse/wife or close friend only about half of the men used a condom. This study had shown that, in both countries, a wide range of brands of condoms are available, at affordable prices, from sources that are easily accessible. Since availability and accessibility are not important constraints to use, the reluctance of men to use condoms may be due in part to two factors: 1) the common perception that the condom is used only with a partner about whom the man is not sure, and, 2) the negative attitudes and experiences that women themselves have concerning the method. The inconsistent use of the condom has implications for the transmission of the HIV and other STDs as well as for pregnancy, especially where the condom is the exclusive contraceptive method used. These findings about condom use clearly indicate that the image of the condom is still a problem. Education, sensitization and condom promotion and marketing programs must be developed with women, as well as men, in mind. Women seem to be influential in the decision to use a condom.

A second conclusion which can be reached is that although the condom is used primarily as a prophylactic, its use as a contraceptive is greater than previously thought. For example, the condom was the only contraceptive used in more than 95 percent of the sexual relations with a spouse by men in St. Lucia and 65 percent of such relations in Barbados. Given this fact, the level of condom breakage reported is cause for alarm. In this study, the length and place of storage and the use of lubricants have been ruled out as contributors to condom breakage. The conclusion that must be reached is that breakage is related to incorrect use of the method. It seems that men are uninformed about the correct procedure for using the condom and are therefore either not leaving enough space between the penis and the condom or may be pulling the condom rather than rolling it on to the penis. There clearly is need for education in the correct use of the method for both men and women to reduce breakage and thereby increase use effectiveness and confidence in the method.

The fear of AIDS is still present among sexually active individuals in both countries. More than two-thirds of the men in each group were concerned about AIDS and other STDs when having sex with someone other than the regular partner. Notwithstanding this fear, many of the men in the panels were still involved in risk-taking behavior like having unprotected sexual relations with more than one sexual partner. It is clear that the fear of contracting the HIV is not as strong a motivation to practice "safe sex" as it was two years ago. It seems that many sexually active individuals, especially the youth, feel that AIDS is a disease which other (older) individuals get. The trend in the sales data and information gathered during the focus and the panel interviews corroborate this view. If this is true, then the focus of the AIDS IE&C efforts needs to be reviewed. As suggested in the group interviews, the public education messages about AIDS need to be stronger. Individuals already know that AIDS can kill, what they need is a better sense of the personal risk involved in maintaining certain sexual practices.

While this study has provided valuable information about attitudes toward condom use and the reasons for its use, if there is one limitation it is that there still are unanswered questions about the attitude and motivation of non-users of condom. A greater effort should be made in the future to understand the motivation of those who have not used the condom. The notion is not to take people away from the pill or tubal ligation, but rather to understand the realistic market for condoms in the region.

VII. DISSEMINATION

The results of this project clearly have implications for the Information, Education and Communication (IE&C) components of private and public sector family planning and maternal-child health service activities. In addition, the results will be important for the commercial promotion of condoms as vehicles for the prevention of the spread of HIV. As a consequence, the results of the study will be widely disseminated within the Caribbean region.

The first stage in the dissemination process was the sharing of this report with the collaborating institutions to further develop the policy recommendations. During the first quarter of 1990, a seminar will be held to disseminate the findings more formally to regional FP/MCH service providers and program managers, epidemiologists and communication specialists from the Caribbean Epidemiology Centre (CAREC), condom distributors, and representatives of the major advertising agencies in Barbados and St. Lucia and with AIDS Committees and Task Forces. The results will also be summarized in a forthcoming issue of ALTERNATIVES, and be presented at the international conference on operations research planned for June 1990.

VIII. POLICY RECOMMENDATIONS

The findings of this study have been shared with key professionals in the collaborating institutions. Together with the researchers, they have made the following recommendations with regard to the promotion of the condom and condom use; condom and AIDS information and education activities; the distribution of condoms; and, further research required.

Condom Promotion

- While male condom users have positive attitudes toward the condom, the same can not be said for women. There is need to increase media promotion and packaging directed toward women as a means of improving the image of the condom. Condoms must be promoted as a safe, effective and appropriate contraceptive for married couples, for visiting relationships, and not just for casual sexual relations.

- The evidence is that the primary purpose for using the condom is to prevent the spread of STDs. However, many men still use it for contraceptive purposes. In promotion efforts, therefore, only a segment of condom marketing should be tied to AIDS prevention.

Information and Education Activities

- One fear, which is perhaps reflected in the recent decline in the sale of condoms is that sexual practice is returning to that observed prior to the AIDS scare of 1985. There are indications that mass media education interventions need to be more aggressive and direct and provide individuals with a better sense of the personal risk involved in maintaining certain sexual practices.
- More needs to be done about clarifying the misconceptions that many men have about strategies for reducing the risk of AIDS. Perhaps the role of spermicides should also be better promoted.
- Confidence in the condom certainly is a problem, if 10% to 12% of condoms used break. Perhaps more careful quality control should be developed in purchasing. And perhaps more stringent requirements on breakage should be mandatory. Perhaps more than 1-2% breakage is simply unacceptable. In any case, instructions should be given to users about what to do in the event of breakage.
- In efforts to reduce the incidence of breakage, additional care should be taken in storage of condoms by distributors as well as by users. Condoms that are stored in warm, humid conditions can deteriorate quickly. A system of checks for private and public sector distribution networks should be initiated.
- Many of the men in the study started using the condom quite late, 22 years old: when their sexual activity was initiated quite a bit earlier. This suggests the need for additional focus on youth and the condom. Materials for young users, with practical information about how to put it on and how to tell your special friend you would like to use one need to be developed and made available to all sexually active youth.
- With the increasing number of female purchasers of the condom, education on how to use the method must also be available for women - whether through inserts in condom packages or point of purchase information packages.

Condom Distribution

- Traditional distribution outlets must be exploited but the use of males as condom distributors must be considered as many men get information on condoms from friends.

Research

- While this study has been informative about how condoms are used by some men, a greater effort should be made to understand the motivation of those who have not used the condom. The notion is not to take people away from the pill or tubal ligation, but rather to understand the realistic market for condoms in the region.

- There still is very little information about attitudes towards nonoxynol-9 treated condoms and whether or not there is a market for them in the Caribbean. This area suggests itself as an area for further research.

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TABLE 1
Profile of Panel Participants

Variable	Barbados (n=46)	St. Lucia (n=36)
<u>Age</u>		
Mean	27.4	33.7
SD	4.5	6.6
<u>Union Status</u>		
Married	6.5	36.1
Common-Law	13.0	-
Visiting	8.7	2.8
Single	69.6	61.1
Divorced*	2.2	-
<u>Sex Partners Past Year</u>		
Mean	5.5	3.8
SD	5.9	5.8
Range	1-31	1-33
<u>Age first condom use</u>		
Mean	18.9	19.8
SD	4.3	5.04

* Current status not known

TABLE 2

Condom Sales Reported by Four Distributors
in Barbados (1985 - 1989)

DISTRIBUTOR	1985	1986	1987	1988	1989 (1st Qtr)
F.B. Armstrong	17,887	32,450	42,111	35,502	10,898
BFPA (Clinic & CBD)	58,464	79,456	66,586	61,200	10,000
T. Geddes Grant	N/A	N/A	545	1,068	658
A & R Tempro	N/A	N/A	29,984	18,336	4,128
TOTAL	86,351	111,946	139,226	116,106	25,684

TABLE 3
Reason for Condom Use Among Sexually
Active Males

Reason	Barbados (n=46)	St. Lucia (n=36)
<u>First Use</u>		
Contraceptive	82.6	97.2
STD Protection	21.7	30.6
AIDS Protection	8.7	2.8
Added contraceptive protection	4.3	5.6
<u>Current Use</u>		
Contraceptive	84.8	77.8
AIDS Protection	63.0	75.0
STD Protection	56.5	72.2
Added contraceptive protection	8.7	19.4

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TABLE 4

Condom Users' Opinion of Special Condom Features

	Barbados (n=46)	St. Lucia (n=36)
Most Attractive		
Lubrication	78.3	58.3
Extra Strength	50.0	75.0
Ribbed (textured)	41.3	2.8
Reservoir tipped	37.0	47.2
Spermicide-treated	13.0	19.4
Least Attractive		
Extra thinness	63.0	52.8
Colour	15.2	11.1
Extra strength	19.6	8.3
Lubrication	2.2	11.1

TABLE 5

Advantages and Disadvantages of Condom Use for
Male and Female Sex Partner

	Barbados (n=46)		St. Lucia (n=36)	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
<u>Advantages</u>				
Prevents STD	93.5	71.7	83.3	38.9
Prevents pregnancy	80.4	91.3	86.1	80.6
Prolongs intercourse	15.2	4.3	5.6	-
Convenience	8.7	6.5	58.3	25.0
No side effects	8.7	4.3	30.6	5.6
Easy to use	6.5	4.3	25.0	11.1
<u>Disadvantages</u>				
Reduces sensitivity	69.6	50.0	19.4	2.8
Interrupts lovemaking	21.7	15.2	33.3	66.7
Breakage	13.0	13.0	5.6	2.8
Fear of breakage affects sexual performance	6.5	2.2	25.0	25.0
Causes irritation	4.3	23.9	-	-
Other*	32.6	23.9	-	-

* most respondents mentioned dissatisfaction with the residual smell of rubber.

TABLE 6
Type of Sexual Relations

	Barbados (n=1995)	St. Lucia (n=1417)
Vaginal	88.5	91.3
Oral	1.2	2.0
Anal	0.9	1.6
Vaginal and Oral	6.0	3.7
Vaginal and Anal	0.8	0.2
Other Combinations	2.1	1.1

TABLE 7
 Frequency and Consistency of Condom Use
 by Panel Members

Frequency of Use	Barbados	St. Lucia
<u>Main Sex Partner</u>	(n=40) 1	(n=29)
Every sex act	22.5	24.1
Almost every sex act	22.5	34.5
Sometimes	25.0	37.9
Rarely	20.0	3.4
Never	10.0	-
<u>Other Sex Partners</u>	(n=46) 2	(n=36)
Every sex act	50.0	41.7
Almost every sex act	21.7	13.9
Sometimes	6.5	2.8
Other	10.9	19.4
Has only one partner	10.9	22.2

1 Based on men who have one main sex partner

2 Based on all respondents

TABLE 8

Knowledge of Measures to Reduce
Risk of HIV Transmission

Measure	Barbados (n=46)	St. Lucia (n=36)
Use condoms	100.0	97.2
Avoid sex with infected person	100.0	71.4
Avoid close contact with infected person	54.3	20.0
Do not donate blood	41.3	17.1
Only use blood donated by relatives /close friends	28.3	2.8
Avoid public baths	23.9	8.6
Use spermicides	6.5	8.6

TABLE 9
Effect of AIDS Information on Sexual Behaviour

Behaviour Change	Barbados (n=46)	St. Lucia (n=36)
More frequent use of condom	87.0	61.1
More careful partner selection	78.3	22.2
Fewer sex partners	71.7	27.8
Refuse to have unprotected sex	50.0	8.3
No anal intercourse	4.3	5.5
Celibacy	2.2	-
Earlier marriage	2.2	-
More frequent use of spermicides	2.2	8.3

TABLE 10
Opinion about Media Information
on AIDS

	Barbados (n=46)	St. Lucia (n=36)
Not aired enough	89.1	88.9
Too complicated	84.8	72.2
Provide enough facts about AIDS prevention & treatment	60.9	52.8
Provide enough facts about AIDS transmission	54.3	66.7
Provide motivation for behaviour change		
- in adults	56.5	63.9
- in youth	54.3	44.4
Message not strong enough	41.3	55.6
Provide misleading information	17.4	5.6

For additional information on the INOPAL Program, please contact The Population Council Regional Office in Mexico (Apartado Postal 105-152, 11560 Mexico, D. F.), The Population Council in New York (One Dag Hammarskjold Plaza, New York, NY 10017), or Office of Population, ST/POP, Agency for International Development, Washington, D. C. 20523.

The projects supported by INOPAL were as follows:

BARBADOS

Barbados Family Planning Association (BFPA). Bay Street, St. Michael, Barbados, W.I. Strategies to increase the use of contraceptives by factory workers in Barbados.

BOLIVIA

Centro de Investigación, Educación y Servicios (CIES). Edif. Santa Isabel, Bloque C-2203, La Paz, Bolivia, S.A. A CBD program with a medical back-up component for union groups in La Paz.

BRAZIL

Assistencia Medica a Industria e Comercio Ltda. (AMICO). Rua Azevedo Macedo 92, CEP 04013, Sao Paulo SP, Brazil, S.A. Assessing costs and benefits of incorporating family planning into a pre-paid HMO plan in Brazil.

Associação Brasileira de Entidades de Planejamento Familiar (ABEPF). Rua Visconde Silva 25, Botafogo-22271, Rio de Janeiro, Brazil, S.A. Alternatives to expand family planning services in Brazil.

Promocao da Paternidade Responsavel (PRO-PATER). Rua Marques de Paranagua 359, 01303 Sao Paulo, Brazil, S.A. Measuring the cost-effectiveness of mass media promotion of vasectomy.

COLOMBIA

Asociación Sociedad Médico Farmacéutica (SOMEFA). Carrera 6a. No. 76-34, Bogotá, D.E., Colombia, S.A. A cost-effective strategy to distribute IUDs among private physicians in Colombia.

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